

ample of Solander's species. In shape it is almost regularly oval, and longer than wide; the valves almost equally convex and deep, while in the dorsal valve there exists a shallow median depression or sinus close to the front, and which corresponds with a broad, slightly elevated mesial fold in the ventral valve. The beak of the ventral valve is moderately produced, incurved and truncated by a large circular foramen, partly margined by a deltidium in two pieces. In the interior of the dorsal valve the loop is elongated and reflected, while a sharp raised septum extends from under the cardinal process to about half the length of the valve. This fine specimen measured 3 inches 2 lines in length by 2 inches 8 lines in breadth, and 2 inches in depth.

Now the largest Tertiary *Terebratula* with which I am at present acquainted measures 4 inches 2 lines in length by 3 inches 1 line in breadth, and 2 inches 1 line in depth; but although the Crag *Terebratula grandis*, to which we would refer, does very much resemble in general form the recent *W. venosa*, the Tertiary shell was possessed of a short loop, and consequently is a true *Terebratula*, while *T. venosa* has an elongated one characteristic of the subgenus *Waldheimia*.

Admiral Sullivan informs me that *W. venosa* may perhaps occur also near Tierra del Fuego, where he supposes Solander's shell might have been found, as he is doubtful whether that naturalist ever was at the Falklands; and he thinks it surprising that during his own long service in that region, while in command of the 'Beagle,' the shell was never found by Darwin or any other of the officers on board, although the dredge was frequently at work.

In conclusion, I may here add that both the Cretaceous and Jurassic periods possessed one or two very large species of *Terebratula*; but none that I am aware of attained the proportions of the largest example of *T. grandis* with which we are acquainted. In the Triassic and Palæozoic periods the species of the genus are fewer in number and of much smaller proportions.

I remain, Gentlemen, yours, &c.,

THOMAS DAVIDSON.

XI.—*List of Coleoptera received from Old Calabar, on the West Coast of Africa.* By ANDREW MURRAY, F.L.S.

[Continued from p. 23.]

Bostrichidæ.

APATE, Fab.

This genus is in a state of considerable confusion. The few species described are for the most part of old date, being chiefly

from the pen of Olivier and Fabricius and other authors of their date; and although tolerable figures are sometimes given by Olivier, it is not surprising, considering the strong family resemblance which prevails in all, that their short descriptions should have left entomologists very much in the dark and almost entirely dependent on tradition for a knowledge of the species intended by them.

Before entering on the description of the species from Old Calabar, I must ask leave to add to the entomological terminology an expression to enable me to deal without periphrasis with the anterior and posterior extremities of the Bostrichidæ. Every one who reads this knows that this group is composed of cylindrical insects which have the thorax terminating in an overhanging straight or excavated or more or less vertical front, and the elytra terminating either in a rapid, steep rounding off, an abrupt, oblique, or even vertical slope, or an actual excavation. These abrupt terminations at each end of the body I propose to call truncatures,—viz. the thoracic truncature and the apical truncature of the elytra. The word does not much matter; as Prof. Owen says, it is a mere tool to do the work. What I want is something to express in a word the declining abrupt termination at either end of the Bostrichidæ. Where it does not occur, of course it will not be used.

1. *Apate terebrans*, Pallas, Spicilegia Zool. Ins. p. 7; Oliv.
Ent. iv. No. 77, pl. 1. fig. 4.

(*A. barbifrons*, Dupont, Dej. Cat.)

Found both in Brazil and Africa, and distinguished from other species by its size and a large tuft of yellow hair and two small projecting triangular teeth on the forehead. The elytra are marked with punctures running into each other, and making a series of rather fine rugosities or slight reticulations.

I have no doubt tradition is correct in assigning this insect to Olivier's *terebrans*, although his figure represents an insect considerably shorter. This we may assume to be an error in the drawing, because we know no other species which is so like the drawing as this, and the description in the text corresponds with that of the species.

I have wasted a good deal of time in carefully comparing the African and Brazilian specimens, with the expectation or desire of finding some difference between them; but have been unable to find anything that is constant or could be called specific. As a rule, the African specimens are more distinctly and deeply marked, and have a deeper fovea round the scutellum; but sometimes there is no such difference, or even the reverse occurs.

If a number of Brazilian and African specimens were mixed together, I think it would be impossible to assign them all correctly to their different countries, although probably the majority might be successfully guessed at.

Not rare in Old Calabar.

The same species also extends to Natal.

2. *Apate muricata*, Fab. Syst. El.

Nigra; capite plano, epistomate parum fulvo piloso antice; thorace utrinque antice dentibus parum uncinatis instructo; elytris profunde reticulatis, nitidissimis.

Long. 14 lin., lat. $4\frac{1}{2}$ lin.

This is a large, handsome insect (the finest of the family), cylindrical, black, with the elytra strongly impressed with deep coarse reticulations, and the raised parts glittering and shining. Head punctate posteriorly, almost impunctate in front, leaving smooth shining spaces about the middle and on each side, with a longitudinal line down the middle, somewhat more deeply impressed at a point in the centre, free from hair or pubescence, but covered on the sides and partially on the front with round, small tubercles. Epistome with a projecting point in the middle and a fringe of yellow pile. Labrum emarginate, almost bilobed, the margin of the lobes fringed with yellow pile; palpi and club of the antennæ piceous. Thorax widest in front, opaque, except behind, divided as it were transversely into two parts; the anterior part broad and large, and covered with denticulations, which at the anterior angles become developed into hooks, the denticulations being triangular projecting teeth near the anterior angles, on the sides and front flattened triangular spaces slightly elevated; the posterior half finely aciculate or subtuberculate, the tubercles here being a modification of the same triangular denticulations, only much finer and more closely adpressed and flattened, in the centre towards the base almost smooth; a slight central longitudinal line runs forward from the middle of the base; there is an indentation on each side of the middle of the base, making the centre into a lobe; the posterior angles are rounded eminences, with two somewhat transverse impressions on the sides. Scutellum rounded, opaque, lying in a hollow. Elytra parallel, cylindrical, deeply and broadly reticulated, with the elevated spaces very bright; there is a longitudinal hollow for about a line and a half behind the scutellum; the base is straight, the shoulders rather prominent and nearly smooth; the apical truncature is hollowed out, and the excavated space shining and nearly



impunctate; the elytra above the truncature terminating in three projecting teeth (the two outermost projecting furthest, and the outermost the smallest); there are faint traces of three raised lines or costæ, of which these teeth are the terminations; the raised reticulations have in some specimens one more developed than usual, like a varicose vein, running transversely from the suture at about one-third of the length of the elytra from the apex. The outer margin has a row of punctures marked off by a slightly raised straight line, within which at the anterior part are two rows of punctures enclosed by an oblique line. Under-side piceous. Metathorax fulvo-pilose. Tibiæ finely externally toothed, especially near the apex.

This I believe to be the *A. muricata* of Fabricius. Some entomologists on the continent still apply that name to it, doubtless from tradition. There is also a specimen in the Fabrician collection, now in the British Museum, bearing this name.

The continental entomologists generally, however, consider it synonymous with *A. terebrans*, Oliv.; and Lacordaire (Gen. Col. iv. p. 538) so records it; but I am convinced that this is an error, and a strong proof that it is so is that *A. terebrans* is found both in Brazil and Africa, while *muricata* is confined to Africa. Its appearance, too, is so different that one can only account for its ever being considered the same by the difficulty of putting the differences into words, and the ease with which a little exaggeration of the characters of *terebrans* would turn it into *muricata*.

It is of the same size as *terebrans*, only broader and not quite so long, giving the effect of a more bulky insect. The thorax is decidedly broader in front, instead of being narrower as in *A. terebrans*. It is deep black, with much deeper reticulations on the elytra, leaving more open raised spaces, which are more shining and glittering. The apical truncature is more vertical.

The descriptions do not help us in the least, that of Olivier's *terebrans* and Fabricius's *muricata* being *totidem verbis* the same for both. Lacordaire makes the suggestion that the tuft of hair on the forehead may be a sexual difference, in which case the present species might be a sex of *terebrans*: it has not the tuft, nor the projecting teeth, and it has an additional and a curved development of the small most advanced teeth on the thorax—both corresponding to a sexual difference which, I think, occurs in another (smaller) species, *A. monacha*; but in it the reticulations are the same in both, which is not the case here; and, besides, as already said, all idea of this being a sex of *terebrans* is excluded by the fact of the one, and not the other, being found in South America.

Not common in Old Calabar. It extends to Natal.

3. *Apate degenera*.

A. muricata valde affinis, fere tertia parte minor; elytris minus rugosis et minus reticulatis, apice haud leviter punctato sed leviter et evanescenter rugoso.

Long. 9 lin., lat. 3 lin.

Very close to *A. muricata*, of which it has the form, but nearly a third smaller, and the reticulations on the elytra not nearly so marked; they are not much deeper or more decided than in *A. terebrans*, but they have the character of those of *A. muricata*. It is exceedingly difficult to find any definite character to distinguish it from the latter; but the difference in its appearance, coupled with the above-mentioned distinctions, seem to warrant its being treated as a distinct species. A minor difference is that the apical truncature of the elytra, instead of being sparsely dotted with small shallow round punctures, is smooth, but marked with faint, evanescent, chiefly longitudinal corrugations.

Only one specimen received.

4. *Apate monacha*, Oliv. Ent. iv. pl. 2. fig. 9.

(*A. reticulata*, Dej. Cat. 333; *A. Leprieurii*, Dej. Cat. 333.)

A. terebranti similis, sed tertia parte minor. *Mas*? Capite cum fronte sine tuberculis sed fasciculo fulvo piloso instructo; thorace cylindrico, haud latiore antice, lateribus anticis vix tuberculatis; elytris subreticulatis, bi- vel tricostatis et apice aciculatim papillois. *Femina*? Capite lævi, haud fulvo piloso; thorace parum latiore antice, lateribus anticis tuberculatis vel minute dentatis, dentibus anticis uncinatis; elytris vix costatis, potius fortiter punctatis quam reticulatis et apice fere lævibus.

Long. $8\frac{1}{2}$ lin., lat. $2\frac{1}{2}$ lin.

The above two forms are, in my opinion, the different sexes of the same species, the specimens which I possess of the allied species, *A. Francisca*, Fab., from Algiers, being of two forms, which are distinguished by similar differences, and which are also probably male and female. In *A. monacha* the general outline of the one is like that of *A. terebrans*, and that of the other is like *A. muricata*, but each about a third less than them in size. What, in accordance with Lacordaire's suggestion, I assume to be the male has a tuft on the forehead, and the elytra are subreticulate and bi- or tricostate; the hollowed apical truncature is acicularly papillose: in the other sex the tuft is absent and the forehead smooth and bare; the thorax is broader, too, and the tubercles or teeth on each side of the front of the thorax are more numerous and extend to its anterior margin, and the foremost of these is hooked. The small tubercles on the disk

are still tubercles, although very small and flat-topped, while in the supposed female they appear as if rolled flat and even with the surface, and the elytra have the costæ less distinct, and are rather deeply punctate than reticulate; the hollow space at the apex of the elytra, too, is nearly smooth.

Var. *indistincta*.—There are some slightly larger and more coarsely reticulate specimens, which look somewhat different; but I can find no tangible character; however, I note it as a variety, because I have received specimens from Natal belonging to it, and not of the normal type.

I have no certain knowledge that this is the *A. monacha* of Olivier; but it corresponds with his description and figure; and as his species is said to have come from Senegal, I think we may assume it to be it, especially as there is nothing else from Africa (so far as I know) to compete with it, except *A. Francisca*, Fab., from Algeria, which, although very close to it, is still distinct. *A. Francisca* can be readily distinguished from the present species, however, by the narrower thorax, the more rounded and decided punctures of the elytra, and more especially by the hollowed apical truncature of the elytra, which in the male of *A. Francisca* is strongly marked with deep, scattered, round punctures; while in this species, on close examination, it will be seen that the truncature, although apparently punctate, is in reality not so, but derives the appearance from raised papillæ or minute tubercles instead of sunk holes. The female of *A. Francisca*, Fab., is *A. Carmelita* of Fabricius, according to Lacordaire.

Common at Old Calabar.

BOSTRICHUS, Geoffr., Lacordaire.

§ 1. Thorax with anterior angles prominently projecting.

1. *Bostrichus protrudens*.

Niger, nitidus; thorace tuberculato, angulis anticis recte projicientibus, apice haud acutis, subtus unituberculatis; elytris striato-punctatis, apice rotundatis, sine truncatura, margine solum parum explanato.

Long. 8–8 $\frac{3}{4}$ lin., lat. 2 $\frac{2}{3}$ lin.



Black, moderately shining. Head invisible from above, in consequence of the projection of the thorax, covered with small round tubercles, which are finest behind; deeply hollowed out behind in a transverse rounded groove reaching to the posterior part of the eye on each side; in front of this furrow is a higher shelf running from the anterior part of the eye on each side; there is a longitudinal line in the middle of this, which has

a slight emargination behind, on each side of which there is a faint elevation : in front of this shelf is a raised rounded ridge divided longitudinally, reminding one of the swollen upper lip of an otter or seal, slightly and shortly bristly, chiefly at the sides ; this raised part projects a very little at each side both to the sides and in front, forming a semicircular epistome. Labrum transverse, entire, rather large, fringed with a moustache of fulvous pile. Thorax cylindrical, nearly as broad in front as behind, roughly tuberculate, except on the disk, where the tubercles are flattened down into flat scale-like markings ; there is an irregular, not very strongly marked, longitudinal dorsal stria. The anterior angles are produced for a space about a third or fourth of the length of the thorax. Seen from above, the projections are nearly straight forward ; seen from the sides, twice as broad as from above, and slightly turned up at the end ; on their underside towards the base there is a tubercle ; along the upper margin and the hollowed front of the thorax lying between the two projections are a number of small teeth or tubercles of different sizes ; this anterior margin slopes obliquely to a channel in the middle, on each side of which is one of the more prominent tubercles ; it is lined on its upper part with a sparing fulvous pile, and immediately above the head it is hollowed out into two smooth shallow foveæ ; there is no marginal edging along the front ; the posterior angles, seen from above, are rectangular. Scutellum slightly raised, somewhat rugosely punctate, and longitudinally impressed. Elytra very deeply and coarsely punctate-striate, the striæ, slightly oblique, being more numerous at the base than at the apex ; suture depressed, most so near the scutellum ; there are three slightly raised costæ running obliquely inwards from the base to the apex, the inner one starting at the base between the third and fourth or fourth and fifth striæ ; and the three or four striæ lying between it and the suture have diminished to two before it reaches the apex ; the second costa is separated from the first by a similar number of striæ similarly diminishing in number as they approach the apex ; the outer costa is scarcely observable except posteriorly ; none of the costæ reach the apex, but stop where the elytra begin to decline to the apex, where, in the species which have apical teeth, they would have terminated in teeth ; the inner costa, as usual, stops first ; the striation and punctuation continues equally marked to the apex ; there is no excavation or smooth space, but the extreme apical margin is slightly explanate, and the edge thickened. Underside clothed with a somewhat loose woolly fulvous pile.

Olivier describes and figures a species from Madagascar under the name of *B. cornutus*, with the angles of the thorax projecting ;

but it cannot be this or any of the following cornute species, for his species has the apex of the elytra hollowed out and with the teeth projecting. I have received another species, under the mistaken name of *Apate cornuta*, from Abyssinia, which comes much nearer this, and which I shall call *B. Abyssinicus*, as from the indications of its characters, which I am about to mention, I may be entitled to give it a name. It is distinguished from *B. cornutus* by many characters. The thorax is much shorter and less massy. The projecting angles of the thorax are not of the same shape: in *B. Abyssinicus* they are not flat, nor broader at the side than above; in it there is no tubercle on their underside. They are turned in in front, and the hollow between them is more rounded, open, and less sloped to the centre; that hollow in it is much more pilose. The whole surface of the thorax (except a longitudinal dorsal space) is covered with well-marked distinct small tubercles, instead of the disk being smooth: its elytra have traces of punctate striæ; but, instead of being remarkably distinct, they are almost merged in a tendency to transverse indiscriminate corrugation. The costæ are also much more prominent.

2. *Bostrichus productus*, Imhoff in Bericht über die Verhandlungen der Naturforschenden Gesellschaft in Basel, vol. v. p. 176.

Mas. Niger, punctatus; thorace cornibus intus haud tuberculatis et elytris haud apice prolongatis. *Femina.* Niger, punctatus; thorace cornibus intus bituberculatis; elytris singulis apice obtuse prolongatis.

Long. $8\frac{1}{2}$ lin., lat. $2\frac{1}{2}$ lin.



Like *B. protrudens*, but easily distinguished from it by the projecting angles of the thorax being curved instead of straight; and the female is equally easily distinguished both from it and the male, as well as the other species with curved thoracic projections, by the apex of each elytron being produced into a projecting knob.

Male. The head is nearly the same as in *B. protrudens*, except that the intermediate shelf between the hollow furrow at its back part and the ridge forming an apparent swollen upper lip is absent; that ridge is consequently broader, and is not marked by any longitudinal line or division. The thorax is also nearly the same, with the following exceptions:—it is narrower in front, and the posterior angles are rather more rounded; the anterior angles of the thorax are incurved instead of being nearly straight, and have a slight turn outwards again at the very tip; viewed

sideways, they are scarcely broader than when viewed from above, and terminate in a point curved upwards; there is no tubercle beneath them, nor on the upperside are there two on each side of the inner lower margin, as is the case with the female of this species. On the upper margin of the curve of the horns the teeth or tubercles are more numerous and larger than in *B. protrudens*. The scutellum does not differ from that of *protrudens*. The elytra differ in the costæ being almost absent, the striation straighter and less oblique, and in the apex of each being prolonged into a rather obtuse triangular end. I see no difference in the underside.

Female. Very nearly the same as the male, but it is distinguished by the elytra each terminating in a prolonged knob. The head is the same. The thorax is scarcely so coarsely tuberculate, and the disk is smooth and only shows a sculpture of the form of adpressed tubercles, instead of having flat-topped smaller tubercles present; and the dorsal longitudinal line is not so deep as in the male: the horns of the projecting angles are longer and less incurved; they have not a tubercle on the underside as in *B. protrudens*, but two on the inner margin of the upperside, one a little behind the point, and the other on the front margin, just before where the curve of the horn begins, with a marginal edging uniting the inner two; the hollow between the horns is greater than in the male. The elytra are, if anything, more deeply punctate, and at the apex, instead of a simple obtuse end, each elytron is prolonged into a rather large conical knob, smooth and shining, a little turned upwards and outwards. In other respects the same description will apply to both.



I state the distinction of the sexes on the authority of Imhoff. Until I saw his description I had regarded the male and female as distinct species.

I have only seen three specimens.

3. *Bostrichus brevicornutus*.

B. productus similis; elytris apice rotundatis dignoscitur.

Long. 6–8 lin., lat. $1\frac{2}{3}$ –2 lin.

Very like *B. productus* (male), but has the elytra without any prolongation. The head and thorax are almost identical with those of that species, while the punctuation is more like that of *B. protrudens*, the striation being, as in it, more oblique than in *B. productus*. The elytra are rounded at the apex, and have the apical marginal edging



of the former species; but it is rough and rugose, instead of being shining and more or less smooth.

Apparently more numerous than the preceding species of this section, but still received only in very small numbers.

§ 2. Thorax with anterior angles not prominently projecting.

The species in this section have not the same facies as the preceding species. They are large, coarse, black insects, with much more real affinity to the genus *Apate* than to the species of the present section, which contains the smaller *Bostrichi*, such as *B. varius*, Illig. (*Dufourii*, Latr.), &c. Indeed the distinction between *Apate* and *Bostrichus* (as that genus is now defined by Lacordaire) would better rest (according to my judgment) on the facies of the insects than on whether the antennæ have the club compact and close or open and loose. There are all degrees of difference in this character to be found in the species forming the two genera; and I should have preferred that *Apate* had been reserved for all the large, coarse, black species, while *Bostrichus* was kept for the smaller ones. But few genera can be so well defined as to escape criticism, at least when they contain more than one species; and to attempt to disturb Lacordaire's arrangement now would be a much worse evil than to preserve some incongruous or ill-characterized genera. A fixed arrangement that we all know and can refer to as a standard is what we have wanted for thirty years past, what Lacordaire's 'Genera' was started to supply, and what that wonderful work has most successfully accomplished.

4. *Bostrichus brunneus*.

Angustus, brunneus; thorace duobus parvis dentibus uncinatis, antice projicientibus, et post hos quatuor vel quinque lineis transversis dentium minorum; clytris lineatim punctatis, lineis irregularibus vix strias formantibus, apice rotundato sat abrupte declivo.

Long. $3\frac{1}{4}$ lin., lat. 1 lin.

The species in question is narrow, dull, and brown. The head is finely papillose or granulated, with a shallow transverse furrow across the front between the eyes, wider and tumid behind this depression; in the middle of the depression there is a short, transverse, slightly raised, smooth line; there is a little fulvous pile on the front of the epistome; the margin of the labrum is also fringed with fulvous pile. The thorax is as broad as long, widest in the middle, sinuate before the posterior angles, which are slightly prominent; the anterior angles are rounded, and terminate in front in two short but rather pro-

minent teeth, which are curved upwards; there is a hollow between these, and the margin is semicircular; behind the thoracic truncature there are about four rows of small teeth running across from side to side; the posterior part of the thorax is finely granulose or papillose. Scutellum small and triangular. Elytra twice and a half the length of the thorax. punctate in lines, many of which are irregular. There are the faint traces of three costæ; the apex declines rapidly, and is rounded at the margin; the sutural line and the margin are both raised at the apex, so that on each elytron they include a slightly depressed, coarsely punctate space, although scarcely so decided as to be called a truncature. The underside is not quite so dark as the upper.

A single specimen.

SINOXYLON, Guér.

1. *Sinoxylon pubescens*.

Piceo-fuscum, pubescens; elytris sexdentatis, sutura sine dente; subtus dilutius, pedibus piceo-testaceis.

Long. $3\frac{1}{2}$ lin., lat. $1\frac{1}{2}$ lin.

Of the type of *S. sexdentatum*, but nearly a third larger. Piceous brown, clothed with a short, pale griseous pubescence close and thickly applied on the sides and back part of the thorax and on the underside; fine and woolly hairs sparingly scattered over the elytra. Antennæ and parts of the mouth testaceous. Head black and finely granulose; there is a narrow ridge or edging along the part that lies next the thorax; a transverse slightly curved line runs from the anterior inner angle of each eye, separating the epistome from the rest of the head; the labrum is covered with fulvous pile. The thorax is widest at about a third from the base, the truncature of which is pear-shaped with the apex in front, and truncate with the anterior angles slightly produced, covered with tubercles, which are largest at the sides; the sides and back part nearly smooth, covered closely with pale griseous pubescence, among which appear a few scattered, very minute, but distinct papillæ. Scutellum small, subquadrate. Elytra with the apical truncature very slightly oblique, almost vertical and even, as if a part of the body had been cut off; irregularly punctate, faintly at the base, and gradually more deeply towards the apex, where the punctuation is very deep, coarse, and rugose; there are traces of the usual three costæ on each elytron, which respectively terminate at the apical truncature in well-developed teeth; the sutural margin and the external margin of the trun-

ature are both a little raised. Underside piceo-ferruginous, pubescent. Legs piceo-testaceous.

One specimen only.

2. *Sinoxylon fumatum*.

Antice testaceo-ferrugineum, postice gradatim piceum, parum pubescens; thorace postice lævi; elytris irregulariter punctatis, fortius versus apicem, apice oblique declivo, singulis duobus minutis tuberculis instructis.

Long. $2\frac{3}{4}$ –3 lin., lat. $1-1\frac{1}{8}$ lin.

Testaceo-ferruginous until past the middle of the elytra, when the colour becomes gradually darker, until at the apex it is piceous. The head and thoracic truncature are rather darker than the rest of the thorax. Head finely granulose, with a transverse curved depression or line behind the epistome. Mandibles piceous. Thorax broader than long, with the truncature covered with dentiform tubercles pointing backwards; the posterior part of the thorax smooth, shining, slightly pubescent, and with traces of very fine tubercles next the tubercular anterior part. Scutellum subquadrate, raised. Elytra very cylindrical, irregularly punctate, faintly at the base, and gradually more coarsely towards the apex, thinly clothed with fine woolly hairs; the apical truncature very slightly oblique, being very nearly vertical, as if the body had been cut through; the truncature is well-defined, slightly sloping inwards to the suture, which is distinctly raised, as well as the margin of the truncature, all round, except at its top; a little within it, near the upper margin, are on each elytron two scarcely perceptible tubercles in the relative position which would have been occupied by the termination of the two inner costæ usually met with in other species. Underside finely pubescent.

There is an undescribed species from Port Philip which is very like this; but it is narrower and has no tubercles at all on the apical truncature. In it the elytra are more coarsely punctate, particularly toward the base; the thorax (except the truncature) is shining and very finely and sparingly punctured; the piceous termination to the elytra is less decided, and the reddish colour brighter. I would call it *S. rufescens*.

Two specimens received.

3. *Sinoxylon nitidipenne*.

Atrum, interdum plus minusve piceum vel piceo-ferrugineum; elytris nitidis, leviter punctatis, truncatura apicali superiore margine rotundato sex-dentata; subtus castaneo pubescens.

Long. $2\frac{1}{3}$ lin., lat. 1 lin.

Black, varying more or less, both in place and degree, to

piceous or piceo-ferruginous; the base of the elytra sometimes ferruginous, and the rest black; the legs testaceous, piceo-testaceous, or piceo-ferruginous. Head finely granulose; the epistome separated from the rest by a very marked line of separation, and more depressed than the posterior part. Thorax broadest behind the middle; the truncature rounded, extending pretty far back; a series of larger teeth and tubercles extending along the sides, others, not so large, across the back part; the front merely granulose; the anterior margin nearly straight; the posterior half of the thorax granulose or finely tuberculate in the middle, smooth, shining, and impunctate on the sides; the basal margin with a transverse depression reaching to the posterior angles, marked with four longitudinal aciculations. Scutellum small. Elytra shining, sparsely and finely punctured, the punctures of different sizes and often indistinct, most deeply marked towards the sides and apex; the apical truncature nearly vertical, with the margin sloped with a gentle curve on the upperside, and with a sharp raised edge on the sides; the sutural line is also raised, and projects in the middle into two teeth; there are also two smaller teeth within the truncature near the upper margin, corresponding in position to the termination of the usual costæ, which are not here present, but within the truncated space; near the apical margin the truncature is slightly hollowed. The underside is covered with a pale chestnut pubescence.

Four or five specimens of this have been received.

[To be continued.]

XII.—On the Occurrence of *Diplommatina Huttoni* in *Trinidad*.

By R. J. LECHMERE GUPPY, F.G.S., F.L.S.

By the kindness of my friend Mr. Thomas Bland, F.G.S., of New York, I was made aware of the discovery, by Mr. Theodore Gill, in Trinidad, of a minute land-shell, which was believed by Dr. Pfeiffer to be identical with the East-Indian *Diplommatina Huttoni*. On the receipt of this information I took the earliest opportunity of making an expedition with the view of discovering this little shell, which had previously escaped my search. I was fortunate beyond my anticipation in finding the *Diplommatina*; but upon the first search I only found two perfect examples. Subsequently, however, I had the good fortune, on revisiting the same locality, to obtain more than twenty living examples. I could not, however, induce the mollusks to show themselves out of their shells; and I was obliged to destroy several in order to obtain a sight of the operculum and the